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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,358	07/14/2003	Hao-Song Kong		6331

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MITSUBISHI ELECTRIC RESEARCH LABORATORIES, INC.  
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EXAMINER
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NGUYEN, LONG P

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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05/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/619,358

Applicant(s)

KONG ET AL.

Examiner

Long P. Nguyen

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/14/2003</u> . | 6) <input type="checkbox"/> Other: ____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1<sup>102</sup> are rejected under 35 U.S.C. 102(b) as being anticipated by klemets (US 5,918,002).

As for claim 1, Klemets shows transmitting a video over a network as a bit stream of packets, comprising: receiving real-time feedback information on conditions of the network while transmitting the packets (**Col. 2 line 55-56**); determining a probability of packet loss based on the real-time feedback (**Col. 8 line 51**); generating redundant packets for selected packets of the bit stream if the probability of packet loss is greater than a predetermined threshold (**Col. 6 line 26-29**).

As for claim 2, Klemets shows the conditions include packet loss rate (**Col. 8, line 51**), available bandwidth (**Col. 9, line 49-53**), and round-trip latency (**Col. 9 line 27-30**).

As for claim 3, Klemets shows in which the selected packet is a header packet of an I-frame (**Col. 12 line 8-10**).

As for claim 4, Klemets shows in which the selected packet is a header packet of a P-frame (**Col. 12 line 8-12**).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemets in view of Jang (US 2004/0027991).

As for claim 5, Klemets shows retransmission of I-frame and P-frame but do not shows retransmit in which the redundant packet is transmitted before an original copy of the corresponding packet.

However, Jang shows in which the redundant packet is transmitted before an original copy of the corresponding packet (**Figure 6, shows, packet 2 and 4 are loss and retransmitted before the original corresponding packet 7**). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the retransmission of Klemets with the packet ordering of Jang in order to efficiently receiving the packet at the receiver in sequential order.

As for claim 6, Klemets shows, in which the redundant packet is generated according to a frame type (**Col. 12, line 8-10**), but do not shows a position of the

original packet in the frame, and the redundant packet is transmitted after an original copy of the corresponding packet.

However, Jang shows a position of the original packet in the frame (**figure 6, ARQ interval**), and the redundant packet is transmitted after an original copy of the corresponding packet (**Figure 6, shows, packet 2 and 4 are loss and retransmitted after the original corresponding packet 3**). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the retransmission of Klemets with the packet ordering of Jang in order to efficiently receiving the packet at the receiver in sequential order.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long P. Nguyen whose telephone number is (571)-272-9740. The examiner can normally be reached on Monday - Thursday 7:30 - 5:00 EST Alternate Friday 7:30-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Long Nguyen



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